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XXXII.—*On Herodias eulophotes Swinhoe.*

By TOM IREDALE.

(Plate XX.)

WHEN preparing our Reference List of the Birds of New Zealand ('Ibis,' 1913, pp. 201-63, 402-52), Mr. Mathews and I had to investigate the Herons grouped in the Catalogue of Birds in the British Museum under the name *Demiegretta sacra*.

On p. 405 we accepted Vieillot's name of *Ardea matook* (Nouv. Dict. d'Hist. Nat. vol. xiv. 1817, p. 416) for the New Zealand bird, but no discussion was given. As a matter of fact little was necessary, as the New Zealand race needed only a superficial glance to grant it recognition as a valid subspecies.

Complications elsewhere ensued through the well-known "dimorphism," *i. e.*, white and blue birds breeding together in the same colony. In his 'Birds of Australia,' vol. iii. pp. 450-455, just published, Mathews has fully discussed the statements made concerning these birds and the varied views held by different observers and writers, and has concluded that two species had better be recognised, but he admitted the extreme difficulty of the group. I would agree that conservatism is the best policy at present, and would emphasize the strong argument that in many places, New

Zealand being one, the white birds are absent. In other places white birds may occur alone, and the bird under notice was so classed in the Catalogue of Birds. At first sight to Mathews and myself it differed appreciably, and we dismissed it as a distinct species and not a subspecific form of *Demigretta sacra*.

Mathews (*loc. cit.* p. 448) has also distinguished it as separable from the genus *Demigretta* and proposed for it the generic name *Hemigarzetta*, writing:—

“It (*Herodias eulophotes* Swinhoe, *Ibis*, 1860, p. 64) recalls *Egretta* almost as much as *Demigretta*. The bill is long and slender, but does not exceed the metatarsus in length: the head is very fully crested with very much developed plumes: the dorsal ornamentation reaches beyond the tail and consists of disintegrated feathers: the breast plumes are lanceolate, but are longer than in *Demigretta*, and much more pronounced; the wing has the first three primaries subequal, the first primary longest, which never occurs in *Demigretta*. The legs are short with exposed tibia, also short, as are also the toes. The short legs and feet place it near *Demigretta*, as *Egretta* has long legs and feet. The frontal covering of the metatarsus consists of transverse scutes as in *Demigretta* as well as *Egretta*.”

I now find that Mathews had overlooked a paper by C. B. Rickett in ‘*The Ibis*,’ 1903, pp. 220–1, where careful comparisons were made and *Herodias eulophotes* was shown to be distinct from *Demigretta sacra*, but the species was retained in *Herodias*, Rickett noting, “In habits *H. eulophotes* is an Egret. It frequents rice-fields, or the sides of inland ponds and creeks, and often nests on the same trees as *H. garzetta*. My collectors have never met with it on the coast.” This confirmation of Mathews’s investigations is pleasing, and the generic location is the only problem. Genus-lumpers will probably include it in *Egretta*, considering the white plumage, though ostensibly ignoring coloration, as a valuable character. It cannot remain in *Herodias*, however, as the white plumage must be subordinated to the great difference in structure.

In the Check List of the American Ornithologists' Union, 3rd ed., 1910, the Snowy Egret (p. 96) is included in the genus *Egretta*, though its nuptial ornaments differ from those of the type of the genus *Egretta*. This bird shows an approach in this character to *H. eulophotes*, but a fact worth emphasis is that Rickett records that the latter "nests on the same trees as *H. garzetta*" (the type of *Egretta*). This at once suggests that a different line of evolution may have been followed by the present bird and that the white coloration is another example of convergence. It should be remembered that we have white as a predominant colour throughout many of the Ardeine birds, and that very different birds as regards structure agree in having a pure white coloration. My own researches tend to show that this recurrence of white has misled previous investigators in many ways, the lumping of this bird with *Demigretta sacra* being a glaring instance. Rickett states that this bird is becoming, if it has not already been, exterminated by plumage-hunters. In consequence, it may be a very rare bird, and as it is so distinct and has never been figured satisfactorily a plate is here given, which shows at a glance the Egret-like plumage and its unlikeness to any Reef Heron (*Demigretta*). Students who have not access to specimens will thus be enabled to gauge its relationships to a fair extent, and all will certainly agree with its dismissal from *Demigretta*, wherever else they may be inclined to place it.

The preceding was written and the plate prepared under the impression that the bird had not been previously figured. While it was in the press the Editor, Mr. W. L. Selater, drew my attention to a plate and discussion of the bird's status in the 'Birds of Celebes' by Meyer and Wigglesworth. The succeeding notes are therefore due to the Editor's intervention, for which my best thanks are here tendered.

When Swinhoe described this form from Amoy, China (Ibis, 1860, p. 64), he characterised it thus:—"This differs from *H. garzetta* strikingly in having a yellow bill, full-crested occiput, and shorter legs. It is a rare and

solitary species." The coloration of soft parts is given as:—"Legs greenish black; feet olive-brown, patched in places with yellow. Bill orange-yellow, becoming flesh-coloured and purplish on the lores and round the eye. Irides pearl-white."

In 'The Ibis,' 1863, p. 418, Swinhoe recorded it as "pretty common" in Formosa, where it appeared to breed in company with other Herons, noting:—"The female is a little larger, but the sexes are not otherwise to be distinguished. This Egret has a fine clear yellow bill in summer, becoming tinged with brown in winter. Its cere is tinged with green and purple; its irides light pearly yellow. Its legs are in summer black, in winter greenish brown: its feet and claws are greenish yellow. From *H. garzetta* it can at all seasons be distinguished by its light and shorter bill, and by its much shorter legs. It loses its crest early in August."

Blyth (Ibis, 1865, p. 37) synonymised Gould's *H. immaculata* with *H. eulophotes* Swinhoe, and described a bird killed at Mergui in South Tenasserim. The description of the crest reads like that of this species, but the note "Australian examples quite agree" cannot refer to crested examples, as no crested Australian specimen was then known.

Meyer and Wigglesworth reinstated this species under the name *Herodias eulophotes*, and gave a coloured plate. As a vernacular they proposed Short-legged White Egret. They gave a full review of the accounts of this bird, and were inclined to follow Blyth in accepting Gould's *H. immaculata* as a synonym. Their remarks were based upon a specimen procured at Mantehage Island in April in full breeding plumage, and another immature obtained by the cousins Sarasin in October. They still retained the species in *Herodias*, considering the differences in the bill, wing-formation, leg-length, and breeding ornaments as of less value than the white coloration, a view still endorsed by some workers.

When Mathews wrote his account of Gould's *H. immaculata* no specimen showing breeding plumes was available, but since then he has received adults in this stage and these show the two occipital plumes seen in *Egretta garzetta* (Linné) and confirm the classification of that form generally accepted. Mr. Mathews has shown me these specimens, and consequently there can be no confusion now between Gould's *H. immaculata* and Swinhoe's *H. eulophotes*.

Regarding the generic name *Herodias*, it has been indicated by the reviewer in the 'Auk' that this name must be construed as an absolute synonym of the earlier *Egretta* of Forster and therefore pass right out of use in any connection.

Mr. Mathews proposes to show that the correct substitute for *Herodias* as used in the 'Catalogue of Birds in the British Museum' is *Casmerodius* of Gloger.

The present species comes much nearer to *Egretta* than to *Casmerodius*, as above noted.

The following are the most important references to this bird, from which it will be seen that it is found along the coastal provinces of China, in Formosa, and possibly also in Japan and Celebes :—

Herodias eulophotes Swinhoe, Ibis, 1860, p. 64: Amoy; id. Ibis, 1863, p. 418: Tamsuy river, Formosa; La Touche, Ibis, 1892, p. 488: Foochow and Swatow; Meyer and Wigglesworth, Bds. Celebes, ii. 1898, p. 824, pl. xliv.: Celebes (Sarasin); Rickett, Ibis, 1900, p. 218: Foochow; id., ibid. 1903, p. 220: Fohkien; La Touche and Rickett, Ibis, 1905, p. 64: Fohkien; Ogilvie-Grant and La Touche, Ibis, 1907, p. 262: N. Formosa.

Demiegretta sacra (Gm.); Sharpe, Cat. Birds Brit. Mus. xxvi. 1898, p. 137 [part.].

Hemigarzetta eulophotes (Swinh.); Mathews, Bds. Australia, iii. 1914, p. 448.



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HERODIAS EULOPHOTES.